

Corrected English Translation of the International
Preliminary Examination Report dated 28 March 1996

Patent Claims

1. Method of determining and furnishing wireless signals and data of wireless signals receivable at the actual receiving location using location data in a broadcast system in which receiving locations in a receiving area are served by one or more transmitters, **characterized by the fact** that for determining data about wireless signals receivable at the actual receiving location first lists (A) are used which contain data about wireless signals which are in principle receivable in a receiving area served by one or more transmitters whereby in the lists (A) one or more indicia are allotted to the data about the wireless signals transmitted by each transmitter, and that for the selection from the first lists (A) of all wireless signals and data about these wireless signals second local lists (B) are used which contain for one partial area each of the receiving areas the indicia allotted to the data about the wireless signals receivable in the given partial area, and that on the basis of the furnished data a wireless signal selected by the user is furnished directly from all wireless signals receivable at the actual receiving location.

2. The method in accordance with claim 1,
characterized by the fact
that the location coordinates of the actual receiving
location are determined and used as the location data.

3. The method in accordance with one of claim 1 or 2,
characterized by the fact
that the data are determined on the basis of wireless
signals which are reliably receivable at the actual
receiving location.

4. The method in accordance with one of claims 1 to 3,
characterized by the fact
that the data about which wireless signals are in
principle receivable in a receiving area served by one or
more transmitters are transmitted by the transmitters.

5. The method in accordance with one of claims 1 to 4,
characterized by the fact
that the data about which wireless signals are in
principle receivable in a receiving area served by one or
more transmitters is stored in the receiver.

6. The method in accordance with claim 5,
characterized by the fact
that upon changes of the wireless signals in principle
receivable in a receiving area served by one or more
transmitters only those of the data stored in the
receiver are exchanged which are effected by the changes.

7. The method in accordance with one of claims 1 to 6,

characterized by the fact

that the data about which wireless signals of the lists (A) are receivable in dependence of the actual receiving location (lists B) are transmitted by the transmitters.

8. The method in accordance with one of claims 1 to 7,
characterized by the fact

that the data about which wireless signals of the lists (A) are receivable in dependence of the actual receiving location (lists B) are stored in the receiver.

9. The method in accordance with one of claims 1 to 8,
characterized by the fact

that at a change in the receiving location only the data valid at the actual receiving location are changed in the memory which differ from the data which was valid at the next preceding receiving station.

10. The method in accordance with one of claims 1 to 9,
characterized by the fact

that the data (lists A) about which wireless signals are in principle receivable in a receiving area served by one or more transmitters are actualized only once in a transmission cycle, whereas instantaneously valid data (lists B) about which wireless signals of lists (A) are receivable in dependence of any actual receiving location are actualized more often.

11. The method in accordance with one of claims 1 to 10,
characterized by the fact

that the local lists (B) which for any partial area of

the receiving area contain the indicia allotted to the data about the wireless signals receivable in the given partial area are compiled into a single list.

12. The method in accordance with one of claims 1 to 11,
characterized by the fact

that the local list (B) valid for the actual receiving location is determined with local data about the actual receiving location from the local lists (B) and that the data about all wireless signals receivable at the actual receiving location is selected on the basis thereof from the lists (A).

13. The method in accordance with one of claims 1 to 12,
characterized by the fact

that individual numbers are allotted as indicia to the data about which wireless signal are in principle receivable in a receiving area served by one or more transmitters (lists A) and that the local lists (B) are compiled from sequences of these numbers.

14. The method in accordance with claim 13,
characterized by the fact

that the data about which wireless signals are in principle receivable in a receiving area served by one or more transmitters (lists A) are transmitted by the transmitters and/or are stored in the receiver, together with the allotted numbers.

15. The method in accordance one of claims 13 or 14,
characterized by the fact

that the data about which wireless signals of the list (A) are receivable in dependence of the actual receiving location (lists B) are transmitted by the transmitters and/or stored in the receiver as sequences of numbers.

16. The method in accordance with one of claims 1 to 15, **characterized by the fact**

that the data about which wireless signals are in principle receivable in a receiving area served by one or more transmitters (lists A) as well as the data which wireless signals of lists (A) are receivable in dependence of the actual receiving location (lists B), do not only contain the currently received frequency band or the currently received channel or frequency block but also other frequency bands, channels or frequency blocks.

17. The method in accordance with one of claims 1 to 16, **characterized by the fact**

that identification signals about transmitter locations transmitted by the transmitters and/or phase comparison hyperbola methods are used for at least approximatingly determining the actual receiving location.

18. The method in accordance with one of claims 1 to 17, **characterized by the fact**

that a method in accordance with satellite navigation is used for determining the actual receiving location.

19. The method in accordance with one of claims 1 to 18, **characterized by the fact**

that at every location within a partial area allotted to

a local list (B) of the receiving area served by one or more transmitters the same receivable wireless signals are receivable.

20. The method in accordance with claim 19,
characterized by the fact

that for an actual receiving location in a partial area the data about wireless signals (lists B) which are receivable in this partial area or in the adjoining areas are transmitted by the transmitters and/or stored in the receiver at the actual receiving location.

21. The method in accordance with claim 20,
characterized by the fact

that at a change to a receiving location in an adjoining partial area the data about wireless signals (lists B) receivable in the newly added partial areas are stored in the memory and the data about receivable wireless signals in the partial areas which relative to the new receiving location are no longer adjoining areas are erased.

22. The method in accordance with one of claims 1 to 21,
characterized by the fact

that for a faster exchange of the data in the memory data regarding the direction of travel is consulted as advance data even before arriving at the new receiving location.

23. The method in accordance with one of claims 1 to 22,
characterized by the fact

that in a broadcast system, particularly in a common frequency system, the wireless signals include at least

the receivable program signals and/or program varieties and/or transmitters.

24. The method in accordance with one of claims 1 to 23,

characterized by the fact

that the data about the wireless signals in principle receivable in a receiving area served by one or more transmitters are compiled and utilized in a single list (A).

25. Receiver for practicing the method in accordance with one of claims 1 to 24,

characterized by the fact

that the receiver comprises a circuit unit for the automatic and/or user controlled determination of local data about the actual receiving location and that, furthermore, in the receiver there is provided a memory in which for the actual receiving location in a partial area the data about all wireless signals (lists B) which are receivable at least in this partial area are storable, and that the receiver furthermore comprises a control unit, whereby, on the basis of local data and the data (lists B), the control unit selects from the first memory all data valid for the actual receiving location about receivable wireless signals from the lists (A), and that these data from the lists (A) valid for the actual receiving area are put at the disposal of the user for his selection by a indicator unit which is part of the receiver.

26. The receiver in accordance with claim 25,

characterized by the fact

that the control unit determines the local list (B) valid for the actual receiving location on the basis of the local data from the lists (B) and selects the data about receivable wireless signals valid for the actual receiving location from the lists (A) on the basis of this valid local list (B).

27. The receiver in accordance with one of claims 25 to 26,

characterized by the fact

the memory is a random access memory (RAM).

28. The receiver in accordance with one of claims 25 to 27,

characterized by the fact

that the receiver comprises an antenna arrangement and/or a further memory, to receive the data about wireless signals which are in principle receivable (lists A) in a receiving area served by one or more transmitters or to read them into a further memory, especially a bulk memory.

29. The receiver in accordance with one of claims 25 to 28,

characterized by the fact

the indicator unit is controllable by the user and comprises an optical indicator and/or an acoustic message.